



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Victor Dzau *et al.*

SERIAL NUMBER: 10/701,789

EXAMINER: Li, Qian Janice

FILING DATE: November 5, 2003

ART UNIT: 1633

FOR: MESENCHYMAL STEM CELLS AND METHODS OF USE THEREOF

Mail Stop Amendment
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO RESTRICTION REQUIREMENT

This communication is in response to the Restriction Requirement mailed on April 19, 2006 in the above-identified application. With a five-month extension, this response is due on or before October 19, 2006.

Applicants elect the invention of Group I (claims 1-12) drawn to methods of tissue regeneration using a composition comprising mesenchymal stem cells expressing an exogenous nucleic acid encoding an Akt polypeptide. This election is made without traverse.

A requirement for election of species was also made. On page 6 of the Office Action, the Examiner stated:

Group I encompasses different types of tissue regeneration and a therapeutic molecule in addition to akt gene product. Upon election of group I, further election of species is necessary. The species is defined as a combination of the following factors:

- a. A specific tissue type for regeneration;
- b. A specific therapeutic molecule selected from the group consisting of a specific homing molecule, such as those recited in claim 7, a specific hormone such as an estrogen, and a specific angiogenic factor such as VEGF, etc. (see claims 6-12).

With regard to point (a.) above, Applicants elect myocardial tissue as the elected species for the tissue type for regeneration.

Regarding point (b.), Applicants note that claim 1 requires an exogenous nucleic acid encoding an akt gene, which confers to MSCs increased viability and survival, but does not

require a “specific therapeutic molecule”. Among the elected claims, only claims 6-12 further comprise another exogenous nucleic acid, i.e., an exogenous nucleic acid encoding a “specific therapeutic molecule”. For this subset of claims, Applicants elect SDF-1 as the therapeutic molecule.

Applicant reserves the right to prosecute claims which are equal to or broader in scope in this or future applications related to the above-identified patent application.

CONCLUSION

Applicants submit herewith a Petition for a Five-Month Extension of Time, along with the appropriate fees under 37 C.F.R. 1.17(a)(5). No additional fees are believed to be due in connection with this filing. If there are any questions, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

The Commissioner is hereby authorized to credit any overpayment or charge any deficiencies to Deposit Account No. 50-0311 (Reference No. 18989-028).

Respectfully submitted,



Ingrid A. Beattie, Reg. No. 42,306
Attorney for Applicants
Tel: (617) 542-6000
Fax: (617) 542-2241
Customer No. 30623

Dated: October 19, 2006